Chapter 3 Affected Environment

The following changes were made in Chapter 3 between the Draft and Final Environmental Impact Statement. Minor corrections, explanations and edits are not included in this list.

- Additional information regarding Port-Orford-cedar surveys conducted by the BLM within the proposed action corridor are given in the Natural Resources section.
- Additional information regarding documented locations of various fish, bird and mammal species according to the Coos Bay district BLM database are given in the Natural Resources section.

Introduction

This chapter presents the baseline environment in and around the corridor of the proposed action. Where appropriate, this chapter also includes baseline information of the southern route (Hwy 42).

General Setting of the Proposed Action

The proposed action is contained within utility corridor ROW or road ROW (principally the CBW Road) over its entire course.

The CBW Road was established in 1872. This road is currently maintained by Coos and Douglas Counties, with each county maintaining the segment of road within its respective jurisdiction.

The utility corridor ROW include BPA and PP&L facilities. The BPA ROW was established in the mid-1950's. Immediately prior to the time of its construction, the timber was removed from the 150-foot wide utility corridor. Construction of the BPA utility corridor included access roads and towers supporting the power lines. The PP&L ROW was established in 1969 in Douglas County. Its construction is similar to that of the BPA ROW.

The proposed action crosses both private and public lands. Each parcel of land is managed by its respective landowner or the landowner's designated land management entity.

The public lands include BLM-managed lands and county parks. BLM lands are managed in accordance with their District Resource Management Plans and the Northwest Forest Plan (NFP). Public lands in Douglas County are primarily managed by the Roseburg District BLM office. BLM lands in Coos County are managed by the Coos Bay District BLM office. The county parks are managed by their respective County Parks Departments.

The private lands are owned by timber companies, large and small business enterprises, electric power transmission facilities, small woodlot owners, ranchers and homeowners. Prior to entering the Coos Bay area, the proposed action would pass through or near the small communities of Lookingglass, Sitkum, Dora, Fairview, Sumner and old Coos City.

Native American Lands

None

Physical Description of the Area, Including Visual Resources

Numerous valleys and drainages dissect the proposed action within the Coast Range, with several steep canyons (including Brewster Canyon). The CBW Road corridor crosses farms, residential areas, rivers, streams and forests.

The Coos Bay District RMP Record of Decision, page 41, discusses Visual Resource Management (VRM) for the District. VRM Class II and Class III areas are described as follows: Representative Class II areas include lands along Hwy 101 and the Coquille Valley. Lands adjacent to most county roads in rural residential areas (such as along

the CBW road) are primarily Class III. Lands along Hwy 42 are managed as VRM Class III. The majority of forest lands in the District are managed as VRM Class IV.

The CBW Road is adjacent to some BLM-managed lands classified as Visual Resource Management Class IV areas. This classification could change to VRM Class III if the CBW Road is designated as a scenic byway. None of the BLM-managed lands bordering the proposed action are VRM Class III viewsheds. See Appendix D for VRM descriptions.

Although they are not BLM-managed lands, the following areas adjacent to the proposed action are classified as VRM Class III viewsheds: 1) Iverson Memorial Park, 2) Dave Busenbark County Park, 3) Judge Hamilton County Park, 4) Dora, 5) Frona County Park, and 6) the region east of the North Fork Coquille River as viewed from Fairview.

General Setting of the Hwy 42 Alternate Route

The Hwy 42 alternative route has a general setting similar to those noted for the proposed action. This route is mostly within VRM Class IV viewsheds. Traffic on this route is considerably heavier than on the CBW Road. This highway is an important commercial and tourist travel corridor.

This alternative is a total of 82.7 miles in length. It would border approximately 2 miles of VRM Class III viewsheds, affecting approximately 340 rural residences and 15.7 miles of urban area.

Environment

Air Quality

The proposed action includes no special airshed management policies. However, Roseburg has been identified as a designated area under the Oregon Smoke Management Plan. This plan controls the timing for agriculture and timber lands that are burned as part of normal land-management practices.

The air quality of the proposed action corridor is typical of the rural air quality in southwest Oregon. Although no data is available regarding the current levels of noxious gases, they are assumed to be at very low levels due to the absence of heavy traffic and heavy industrial development.

Airborne particulates are at low levels in the proposed action corridor. Minor and temporary increases in dust particulate levels occur occasionally due to farming and logging operations in the area. A minor amount of smoke is common during cool weather periods near residences using wood-burning appliances.

Geology

Refer to the Geotechnical Report in Appendix A for this information.

Natural Resources

Cultural Resources (Including Native American Religious Concerns)

Refer to the Cultural Resources Report in Appendix B for the proposed action information. The Hwy 42 alternative contains no known cultural resources, as all construction would occur on highway road fill.

Soils

Refer to the Geotechnical Report in Appendix A for this information.

Proposed Action Vegetation

Roadside vegetation along the CBW Road ROW often lacks trees due to the county road maintenance practices for maintaining traffic safety. The vegetation is primarily grasses and small trees.

Vegetation within the utility corridors of the proposed action is typical of the area's vegetation, except it lacks trees due to vegetative management practices. The utility corridors support colonies of noxious weed species (from constant disturbance) that are annually targeted for control or removal by BPA and PP&L maintenance crews.

Current vegetation patterns along the proposed action are a result of past anthropogenic management from timber harvesting, farming and human settlements.

Happy Valley contains open oak woodlands and farmland. Vegetation from Lookingglass to Reston is primarily pasture grasses and agricultural crops with interspersed oak woodlands. Small to medium parcels of agricultural land are located near Sitkum, Dora, McKinley, Fairview and old Coos City. In total, agricultural lands border approximately 10 miles of the proposed action corridor. Less than 1 percent of the landscape adjacent to the proposed action corridor is residential. The remaining vegetated lands bordering the proposed action corridor are coniferous forest.

Forest-types are as follows: 1.4 miles of young forest (0-15 years old); 38.2 miles of second-growth forest (16-79 years old); and 9.1 miles of mature forest (80+ years old).

Forest Types

The forest types along the proposed action corridor are classified under three categories:

Young Forest: Young forests are areas cleared with stands established within the past 15 years. Stand structure is simple with hand-planted and naturally seeded coniferous trees 3 to 25 feet tall and are interspersed with naturally established hardwoods and shrubs. Disturbed soils and residual forest materials from logging are common. Hardwood release treatments and animal damage control measures are commonly used to accelerate development of young conifer.

Second-growth Forest: Dominated by Douglas-fir, these stands are generally between 16 to 80 years old and range from 25 to 150 feet tall. Younger stands contain high stem densities, while older stands have experienced natural thinning and selection influences from wind-throw, insect or disease infestation and competition for sunlight. Openings appear in the canopy where these influences have caused tree mortalities. Silvicultural prescriptions often include tree thinning operations within these stands to reduce stem density.

Mature (Late Seral) Coniferous Forest: Dominated by Douglas-fir, these stands are older than 80 years. Trees range from 80 to over 200 feet tall. Old-growth stands (200+ years) typically have multi-layered canopies and low stem density.

No Port-Orford-cedar were found during a survey conducted by the BLM along the proposed action corridor.

Vegetation of the Hwy 42 Alternative Route

Vegetation within the Hwy 42 route is similar in nature to the vegetation within the CBW Road ROW, except the safety margin (removed trees for improved visibility) is often wider.

This route borders 29.0 miles of second-growth forest land and 4.5 miles of mature forest land. In addition, it borders 28.3 miles of agricultural lands.

Farmlands, Prime and Unique

None of the farms along the proposed action or Hwy 42 alternate route have been designated as Prime or Unique Farmland.

Floodplain

The proposed action is adjacent to 2.2 miles of 100-year floodplain located along the CBW Road near Sumner.

The Hwy 42 route borders 15.3 miles of 100-year floodplain from near Myrtle Point to the coast.

Water Quality, Quantity and Domestic Use

Domestic-use (Proposed Action): Pipeline construction will disturb the top 5 feet of the soil, with 65% of the disturbance occurring within road fill of 5 to 10 feet deep. Domestic-use water wells nearest the proposed action generally exceed 50 feet depth. No registered domestic-users of water exists in streams along the proposed action.

Domestic-use (Hwy 42 Route): Pipeline construction would be limited to disturbance within road fill areas.

Water Quality (Both): Water quality environmental baselines may be affected from pipeline construction that crosses streams (188 stream crossings for the proposed action and 209 stream crossings for the Hwy 42 route). See discussion below of waters along the routes; Appendix E, which contains specific water quality baseline conditions by watershed; and Appendix I, which contains a list of streams that would be crossed by the proposed action.

Water Quantity (Both): Water quantity will not be impacted by either action alternative, as any active streams crossed during pipeline construction will have water piped around the construction area back into its natural stream channel.

Waters Along the Proposed Action

Appendix I contains a listing of intermittent and perennial flowing waters within the proposed action corridor. The corridor crosses 188 natural waterways (streams, tributaries or natural drainage channels). Of these waterways, 2 are large streams (greater than 30 feet wide) and 6 of them are medium streams (15 feet to 30 feet wide). Isthmus Slough is an estuary with a width of approximately 400 feet at the crossing point.

During periods of extended rainfall, the streams in the coast range reach their high water mark. During this time, the floodplains (referenced in “Floodplain” above) become inundated with water. During the proposed pipeline’s construction season (June 1 to November 1), these floodplains would lack standing water.

The proposed action crosses two wetlands on private land near Coos Bay, OR. Refer to “Wetlands” (below) for further detail.

Wetlands

Jurisdictional wetlands are defined as:

> “... areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” (33 [CFR] 328.3, 40 [CFR] 230.3)

Wetlands Identified Along the Proposed Action

Wetland delineation efforts were conducted during field surveys within the proposed action corridor. A series of small seasonal “potholes” were identified as wetlands near the town of Fairview. If pipeline construction occurs at this location during the season when these wetlands are dry, they will be conventionally trenched. If pipeline construction occurs at this location during the season when these wetlands are wet, they will be directionally drilled to avoid any potential negative impacts.

The majority of tidal wetlands along the Isthmus Slough will be avoided by the proposed action. The slough channel, Hwy 101 and the adjacent railroad grade would be directionally-drilled to avoid any potential negative impacts. The drill entry point (west side) is approximately 20 feet above sea level, therefore well-drained. The drill exit (east side) is adjacent the slough in the bottomlands, therefore poorly drained. A wetland survey conducted along this portion of the proposed action corridor indicated that the majority of the vegetation adjacent to the slough bottoms is not associated with jurisdictional wetlands. However a small seasonal wetland was delineated during this survey just east of the drill exit point. If pipeline construction occurs at this location during the season when the slough bottoms are dry, they will be conventionally trenched. If pipeline construction occurs at this location during the season when the bottoms are wet, they will be directionally drilled to avoid any potential negative impacts.

Waters along Hwy 42 Alternative Route

The surface waters crossed by the alternate route are similar to that of the proposed action. The Hwy 42 route would cross a total of 209 streams, 18 of which are large streams and 12 of which are medium-sized streams.

Wetlands Identified Along the Hwy 42 Alternative Route

Wetlands along the alternative route were typically associated with streams or rivers flowing parallel to the course of the roadway.

The Hwy 42 alternative route has the potential to affect 9 wetlands.

Wild and Scenic Rivers

No federally designated "Wild and Scenic Rivers" are within 10 miles of the proposed or alternate routes.

Wilderness or Wilderness Study Areas

No federally designated Wilderness or Wilderness Study Area are within 5 miles of the proposed or alternate routes.

Wildlife

The proposed action corridors lack snags and trees or other suitable breeding, feeding and sheltering habitats for federally listed, proposed, candidate or survey and manage species. No breeding or sheltering habitats for special status species occurs in the proposed action corridor. However, the proposed action utility corridor may contain foraging habitat for a few special status bats and birds. The Hwy 42 corridor contains no habitat for terrestrial species. In general, roadways and utility corridors have been cleared of trees and brush wherever they grow within the Hwy 42 and proposed action corridors. There is one location in the proposed action where 25-year old trees on private ownership will be removed during pipeline construction (approximately 0.2-acre total). Overall, the action alternatives (including the proposed action) contain either no wildlife habitat (CBW Road, Hwy 101 and Hwy 42) or no suitable nesting/roosting habitat for wildlife species (utility corridors).

No part of the construction area within the proposed action corridor is managed under special habitat requirements.

However, BLM-managed lands adjacent to the proposed action corridor are managed for requirements related to special status, threatened and endangered species, as well as overall protection of ecosystem functions. Some of these lands are designated for special management as prescribed in the NFP Record of Decision. In the vicinity of both action alternatives, Late-Successional Reserves (LSR) and Riparian Reserves are included. The proposed action corridor bisects LSR #261 and three CHUs: One spotted owl CHU (OR-60) and two marbled murrelet CHUs (OR-06-b and OR-06-d), which are delineated on maps in Appendix C of the Draft EIS.

Federally Listed, Proposed or Candidate Species

Species listed as "endangered" under the ESA are those which are in danger of extinction in all or a portion of their range. Species listed as "threatened" are under threat of endangerment. Six listed species potentially exist near the proposed alternatives.

(Because of the sensitivity of nest site data, the exact location of nests is only provided on a need-to-know basis and is therefore not included).

Northern Spotted Owl (*Strix occidentalis)*

The northern spotted owl is a federally listed threatened species. Suitable habitat is adjacent to both action alternative routes. Approximately 30 percent of the proposed action is within 0.25-mile of suitable northern spotted owl habitat. Approximately 20 percent of the Hwy 42 alternative is within 0.25-mile of suitable northern spotted owl habitat. This habitat generally consists of late-successional forest, but mature stands with closed canopy and diverse structure are also considered suitable.

The suitable habitat within 1.5 miles of the proposed action has been surveyed for northern spotted owls. The Pacific Northwest Research Station, Ecosystem Processes Research Program, has conducted 13 years of northern spotted

owl research on the BLM-managed lands, and the BLM funded a 5-year Pacific Southwest Research Station demography study. The only suitable habitat within 0.25-mile of Hwy 42 or proposed action corridors is on federal land.

Within the general study area there is a 1,011 km^2 (approximately 400 mi^2) density study area where intensive spotted owl survey and monitoring is conducted (Forsman and Anthony, 1999).

The key issue related to northern spotted owls and the proposed action is possible nest site disturbance. The USFWS considers nest sites disturbed when activities causing moderate noise above ambient levels occur (such as pipeline construction) within 0.25-mile of the nest site (except for blasting, which may disturb northern spotted owls up to a distance of 1.0 mile). Some segments of all the action alternatives are near suitable habitat. The most recent documentation (surveys through 2001) of northern spotted owl sites show that one pair is within 0.25-mile of the proposed action.

Marbled Murrelet *(Brachyramphus marmoratus)*

The marbled murrelet is a federally listed threatened species. Suitable marbled murrelet nesting habitat, as defined by the USFWS marbled murrelet survey protocol, is present within 0.25-mile of both action alternative routes. Habitat was confirmed using Geographical Information Systems (GIS) stand age-class data, aerial photographs and field observation. Biologists on the ground further refined and delineated suitable habitat into areas needing protocol surveys. In general, forest stands within 50 miles of the coast with nesting platforms (usually 80+ year-old trees) are considered suitable habitat. Approximately 30 percent of the proposed action is within 0.25-mile of suitable marbled murrelet habitat. Approximately 20 percent of the Hwy 42 alternative is within 0.25-mile of suitable marbled murrelet habitat.

Studies in 1992 and 1997 found marbled murrelet abundance to be low in southwestern Oregon. Of 889 intensive 2-hour surveys, only 17 resulted in marbled murrelet detections, and only three stands overall were considered occupied based on these surveys (USDA/USDI, 1998).

Unsurveyed suitable habitat and nest site disturbance from construction activities is the primary management concern in the proposed action.

Marbled murrelets may be disturbed up to 0.25-mile from pipeline construction activities (except for blasting, which may disturb marbled murrelets up to 1.0 mile).

Surveys conducted on the Coos Bay BLM District indicate there are two occupied stands within 0.25 mile of the proposed action corridor.

Designated Critical Habitat for the Northern Spotted Owl and Marbled Murrelet

Critical habitats have been designated for the northern spotted owl and marbled murrelet in Oregon. The USFWS has designated CHUs for northern spotted owl and marbled murrelet on some BLM lands adjacent to all the action alternatives. CHUs are protected under the ESA and cannot be adversely modified unless impacts can be completely mitigated (see maps showing critical habitats in Appendix C of the Draft EIS). The determination of impact avoidance, minimization and mitigation for these critical habitats is conducted through the ESA and not NEPA. However, to meet the disclosure requirements for NEPA, Chapter 4 identifies the types of impacts that may occur and makes reasonable predictions as to the likelihood that impacts can be effectively avoided, minimized or mitigated.

It is also important to distinguish between designated CHUs (regulatory definition) and currently suitable habitat, which is a biological definition. CHUs are lands specifically designated by the USFWS to protect a listed species, whereas, suitable habitats are areas that provide shelter, breeding sites, foraging habitat or other elements necessary for a species' life-cycle. Because CHUs are regulatory and suitable habitat is biological, not all suitable habitat for marbled murrelets or northern spotted owls are designated critical habitat; and conversely, not all designated critical habitat is suitable habitat.

Bald Eagle *(Haliaeetus leucocephalus)*

Currently, the bald eagle is a federally listed threatened species. Key habitats include wintering areas, nest areas, roost sites and foraging areas, such as waterfowl concentration areas and areas of abundant fish availability.

The Umpqua River is an area of high eagle concentration (Kritz pers. com.). There are 6 documented occurrences of bald eagle nests within 1.0 mile of this river. No occupied bald eagle nests are within 1.0 mile of the proposed action or Hwy 42 corridors.

Columbian White-tailed Deer *(Odocoileus virginianus leucurus)*

This federally listed endangered species utilizes the lowlands of the interior valley, with preference for oak woodlands and meadows with nutritious forage. The geographic range for the Roseburg population of Columbian White-tailed deer (CWTD) is confined to Douglas County, Oregon. It was defined as follows in the 1983 CWTD Recovery Plan:

> "From Oldham Creek 3 miles northeast of Oakland, south to Cow Creek, 3 miles southwest of Riddle. Morgan Creek, 1.1 miles north of its intersection with the South Umpqua River, is the southeastern-most extent of its known range, whereas the northwest boundary extends to the town of Umpqua. The eastern boundary is Fall Creek, 0.3-mile south to Little River; the western boundary is Hawkins Lake. Since 1983, the population range has expanded 5 to 10 miles in all directions, with more dispersal occurring along riparian corridors." (Peterson, USFWS, pers. com.).

CWTD are likely to occur around the easternmost portion of the project area where habitat is suitable. This species is documented to exist in Cottage Grove, Callahan, Garden Valley, Nonpareil, Oak Creek Valley and Winchester United States Geological Service (USGS) quadrangles. Since the last recovery plan revision in 1983, the population has increased from 2,000-2,500 to 5,000-7,000 individuals, and approximately 4,000 ha (10,000 acres) of habitat has been secured (Peterson, USFWS, pers. com.). The USFWS published a "Proposed Rule to Delist the Columbian White-Tailed Deer" on May 11, 1999 (Federal Register Notice 64FR25263). The Oregon Department of Fish and Wildlife (ODFW) has delisted the CWTD from its previous threatened status to its current vulnerable state status.

Disturbance from construction activities is the only management concern in the Hwy 42 alternative and proposed action. There are no disturbance-related management requirements for CWTD.

Brown Pelican *(Pelecanus occidentalis)*

The brown pelican is a federally listed endangered species. They are documented in areas mapped on the Lakeside USGS quadrangle. Although the brown pelican may forage in and around the coastal bays during the summer, they rarely come inland. They are considered unlikely breeders north of California. No known breeding sites are within 20 miles of either the Hwy 42 alternative or proposed action.

Western Snowy Plover *(Charadrius alexandrinus)*

The nearest documented nesting area for this threatened species is the North Spit of Coos Bay (BLM 1994a) on the sandy beaches and dunes of the immediate coast.

BLM Special Status Species

Terrestrial Wildlife

The BLM Special Status Terrestrial Wildlife Species list for the project area is in Appendix K1. No suitable nesting or roosting habitats occur within the action alternatives. Field surveys found no special status wildlife occurring within the proposed action's construction corridor. The primary issue related to special status wildlife and the proposed action is disturbance (noise). The T&E species disturbance issue is addressed under the Federally Listed, Proposed or Candidate Species sections in Chapters 3 & 4. No other special status species in the Hwy 42 or proposed action vicinity have disturbance-related management requirements.

Special Status Birds

No special status bird species' roosts or nests are known to occur within or adjacent to the Hwy 42 or proposed action corridors. There is no breeding and sheltering habitat available in either action alternatives' corridors. It is possible that peregrine falcons and northern goshawks may move through and forage in the proposed action powerline corridor intermittently throughout the year, because both the Hwy 42 alternative and proposed action occurs within the range of these species. However, these two species have never been documented in the BPA or PP&L powerline corridors. No other special status birds are known to exist in or adjacent to either action alternative areas.

Special Status Mammals

Bats - Bat species occurring in this area are found using various habitats that provide shelter and adequate temperatures for thermal regulation, including caves, mines, man-made structures and trees with cavities and/or exfoliating bark. Suitable bat roosts are typically found in higher densities in older forests, because they tend to contain larger trees and snags. In general, bats utilize forest openings and water bodies for navigation and foraging. No suitable hibernacula exists within the Hwy 42 or proposed action corridors.

Fisher - Although in the range of fisher (Maser 1998), no confirmed sightings of fisher have occurred within the Hwy 42 or proposed action project areas. Neither action alternative contains any suitable habitat for fisher, nor is it likely individuals exist adjacent to the Hwy 42 or proposed action corridors.

Disturbance from construction during foraging activity is the primary management concern for special status mammals and the proposed action. There are no disturbance-related management requirements for foraging special status mammals.

Special Status Amphibians

Although considered possible on both BLM Districts, no documented sightings of special status amphibians have occurred near the Hwy 42 or proposed action project areas. Neither action alternative contains suitable habitat for special status amphibians.

Special Status Reptiles

Neither action alternative contains suitable habitat for any special status reptiles, except the western pond turtle. One documented sighting occurs within 2 miles of the proposed action corridor. The Isthmus Slough tidal marsh area and the private wetland near Coos Bay are the two places containing potential western pond turtle habitat within the proposed action. The Hwy 42 alternative crosses 9 wetlands containing potential western pond turtle habitat. No western pond turtles are known to occur in any of these potential habitat areas. All areas for both action alternatives containing potential western pond turtle habitat would be directionally-drilled to avoid aquatic system impacts, thus avoiding any potential impacts to western pond turtles.

Plants (including lichens, bryophytes and fungi)

The BLM Special Status Vegetation Species lists for the project area is in Appendix K1. The primary issue related to special status vegetation and the proposed action is destruction or physical injury to individuals from soil disturbance during construction. Field surveys found no special status vegetation occurring within the Hwy 42 alternative or proposed action construction corridors. Vegetal species have no noise disturbance-related management requirements.

Invertebrates

The BLM Special Status Invertebrates Species list for the project area is in Appendix K1. The primary issue related to special status invertebrates and the proposed action is destruction or physical injury to individuals from soil disturbance during construction. Field surveys found no special status invertebrates habitats occurring within the Hwy 42 or proposed action construction corridors. Invertebrates have no noise disturbance-related management requirement.

Fish

Essential Fish Habitat (EFH) for all anadromous fish species was considered as part of the Aquatic Biological Assessment (Appendix E).

Under section 305 of the Magnuson-Stevens Act, Federal agencies which authorize, fund or undertake any action which may adversely affect any EFH are required to consult with the NMFS in order to receive recommendations on measures necessary to conserve and enhance EFH.

The NMFS is required to provide EFH conservation recommendations to the BLM for actions that adversely affect EFH. Since the impacts of the proposed actions are likely to be insignificant or negligible, no EFH conservation recommendations are proposed for these projects. The BLM must reinitiate consultation with NMFS if the action is substantially revised in a manner that may adversely affect EFH or if new information becomes available that affects the basis for NMFS' EFH conservation recommendations (50 CFR Section 600.920 [k].)

Table 5: Special Status fish species in streams near the proposed action

Fish	Status	Related Streams
Oregon Coast Coho Salmon	Federally Threat-ened Species	Cherry Creek, Middle Creek, E. Fork Coquille River, N. Fork Coquille River, Evans Creek, Hantz Creek, Steel Creek, Catching Creek, Bill's Creek, China Creek, Rock Creek, Morgan Creek and others
Oregon Coast Steelhead	Federal Candidate Species	Tenmile Creek, Cherry Creek, Middle Creek, E. Fork Coquille River, N. Fork Coquille River, Evans Creek, Hantz Creek, Steel Creek, Catching Creek
Oregon Coast Chinook Salmon	BLM Special Status Species	E. Fork Coquille River, Steel Creek, Isthmus Slough, N. Fork Coquille, Middle Creek and Cherry Creek
Oregon Coast Cutthroat Trout	Federal Candidate Species	Cherry Creek, Middle Creek, E. Fork Coquille River, N. Fork Coquille River, Evans Creek, Hantz Creek, Steel Creek, Catching Creek, Bill's Creek, China Creek, Rock Creek, Morgan Creek and others

Survey and Manage Species

Survey and Manage Species surveys are normally done when: (1) A project has the potential of being a ground-disturbing activity which may alter vegetation or other habitat elements on federally managed lands; (2) the project is within the suspected range covered by the protocol; and (3) the project must occur within suitable habitat for the species.

The BLM Districts' Survey and Manage Species list for their administration areas are in Appendix K. Field surveys revealed no suitable Survey and Manage habitats on BLM-administered lands within the proposed action and Hwy 42 construction corridors. Field surveys for Survey and Manage Species/Habitats were conducted in autumn of 2000. The primary issue related to Survey and Manage Species and the proposed action is disturbance (noise). Survey and Manage species do not have disturbance-related management requirements.

Red Tree Vole

The red tree vole (*Phenacomys longicaudus*) is a Northwest Forest Plan Survey and Manage species, generally found more abundant in late-successional coniferous forests containing Douglas-fir. Field surveys found no individuals or suitable habitat within the proposed action or Hwy 42 corridors. However, noise disturbance during construction activities in the proposed corridor do have the potential to temporarily disturb individuals in adjacent suitable habitat. Once pipeline construction is complete, disturbance will be minimal. No mitigation for noise disturbance is needed for Survey and Manage species.

Survey and Manage Mollusks

The Amendment to the Survey and Manage Protection Buffer and other Mitigation Measures Standards and Guidelines (USDA 2001) gives the interagency standards and guidelines for identifying species to be protected through survey and management strategies. Among those listed are terrestrial and aquatic mollusks that occur within the range of the northern spotted owl. Survey protocols were also established.

Field surveys found no Survey and Manage mollusks habitats within the proposed action alternatives.

Survey and Manage Amphibians

Only one amphibian species, the Del Norte salamander, has potential for living within any of the proposed corridors. The nearest known Del Norte salamander site is approximately 25 miles south of the Hwy 42 alternative and proposed action areas.

Field surveys revealed no findings of individuals or potential habitat for the proposed alternatives. Del Norte salamander suitable habitat is rocky outcrops and talus within forested areas, especially older and wetter stands.

Survey and Manage Bryophytes, Lichens, Fungi and Vascular Plants

Field surveys revealed no findings of habitats for the proposed action alternatives.

General Wildlife Groups

Complete lists of general wildlife occurring on the Coos Bay and Roseburg BLM Districts can be found in their respective Resource Management Plans published for each district.

Raptors

Raptors include hawks, falcons, owls, eagles and vultures. Although incomplete, the current BLM database does not indicate any known nest sites occuring within 0.25-mile of the proposed action corridor, other than the one spotted owl nest site (previously discussed under federally-listed species).

Daytime foraging activities from some of these species may be within the 0.25-mile radius of construction. Disturbance from construction activities is the primary management concern for the proposed action. There are no disturbance-related management requirements for unlisted species of foraging raptors.

Cavity-Nesting Birds

Cavity-nesting birds generally nest inside tree cavities and rock crevices. Examples include woodpeckers, American kestral, western bluebird, Pacific-slope flycatcher and northern pygmy-owl. These species typically require larger-diameter trees (greater than 10 inches). Suitable trees are typically dead or dying and tend to occur more frequently in older forests. However, residual snags from logging or fire can provide suitable habitat in younger age-classes. Some species, such as the western blue bird and northern pygmy owl, prefer early-seral stands that have natural or disturbance-related openings containing suitable cavity-producing snags. The utility corridors and roadways that will be used for pipeline construction contain no cavity-related suitable habitat. The utility corridors, however, may provide foraging opportunities for some cavity-nesting species.

Other Birds

A variety of other migratory and resident birds exist within the project area. A variety of song-birds and waterfowl typically migrate from southern latitudes to breed in southwest Oregon.

Resident birds (juncos, chickadees, crows, ravens, etc.) may have seasonal movements, but tend to stay within their home-range vicinity all year. Game birds, such as quail, grouse and wild turkey, are also resident birds. Some of these species spend at least part of their life-cycle in ground-disturbed habitat, such as foraging within powerline utility corridors and agricultural lands.

Deer and Elk

Deer and elk occur throughout the project area. They provide recreational opportunities for people (i.e., hunting and wildlife observation) and are important prey species for black bears and cougars. Individuals are often seen feeding in forest clearings and wet meadows. Both species may use utility corridors and agricultural lands for feeding and travel/migration.

Carnivorous/Omnivorous Mammals

The project area may support populations of coyote, red fox, common gray fox, black bear, ringtail, raccoon, porcupine, opossum, river otter, bobcat and cougar. The cougar and black bear are game animals in Oregon, providing recreational opportunities (hunting) within the project area. Carnivorous/Omnivorous mammals may use utility corridors and roadways for travel/migration.

Small Mammals

Several species of small rodents such as shrews, rats, mice, squirrels and voles may be present within the powerline utility corridor. These species tend to prefer the early-successional habitats common in utility corridors and agricultural lands, although a few species such as the flying squirrel and white-footed vole prefer developed forests. This type of habitat is adjacent to both action alternatives.

Burrowing Mammals

Burrowing mammals such as the mole, rabbit, mountain beaver, ground squirrel and pocket gopher are known to occur throughout both of the proposed alternatives. Some of these mammals may be locally abundant and provide an important food source to predators. Because burrowing animals usually require deep, loose soil, areas containing deeper soils are the most suitable habitat for them.

Reptiles

Various non-sensitive reptiles (such as turtles, lizards and snakes) have habitat ranges within the project vicinity. Most reptiles with populations in Oregon are likely to occur in developed forests or drier environments east of the coastal mountains.

Invertebrates

Various species such as mollusks and insects are found in the project vicinity. Insects are an important source of food for some species of birds, fish and reptiles.

Amphibians

Both action alternatives include a number of stream crossings that include trenching dry and flowing streams as part of pipeline construction. These stream crossings would include some potential habitat for amphibians during portions of their life-history cycle.

Various non-sensitive amphibian species (for example, frogs and salamanders) may be found intermittently in the project vicinity. These are a food source for mammals, fish, birds and reptiles. Amphibians use habitat features such as large down woody material, talus slopes, creeks, seeps and ponds.

Fish

The fish resources in the proposed action corridor include resident, anadromous and fluvial species. Three streams (Tenmile, Morgan and Rock Creek) to be trenched using “Bag and Flume” along the pipeline route contain enough summer waterflow (>0.1 cfs) to contain fish during active construction. Eighteen other small drainages with very low summer waterflow (<0.06 cfs) will be trenched in the utility corridor portions of the pipeline construction. There is no realistic potential for fish to be in the upper reaches of these 18 small streams in the area of active construction during the summer, as their flows during that time are too small for sustaining fish. The primary issue related to fish and Hwy 42 alternative/proposed action is short-term increases in stream sediment and turbidity from construction soil disturbance. This issue is directly addressed in Appendix E. Although no critical habitat streams exist in or near the proposed action corridors, Essential Fish Habitat (EFH) for fish species was considered as part of the EIS Aquatic Ecosystem Assessment (Appendix E-1).

Human Environment

Area of Critical Environmental Concern (ACEC)

Part of the North Spit of Coos Bay (sand dunes area) has been designated as an ACEC. NW Natural plans to build a distribution system to commercial manufacturing facilities already operating on the North Spit would avoid this area completely and stay within areas zoned for manufacturing or public roads. This distribution system would be constructed under both action alternatives.

Public Health and Safety

The primary issue of safety for the proposed action/Hwy 42 alternative is traffic on roads where pipeline construction is occurring. Accidents are possible if pedestrians or vehicles fail to heed signs and flaggers controlling traffic flow or enter active construction areas without permission. After construction is completed, the primary issue for public safety and pipeline operation would be damage from someone digging without permission with heavy equipment (such as a backhoe) or unauthorized use of explosives in the near vicinity of the pipeline.

Environmental Justice

Executive Order 12898 of February 11, 1994 requires each federal agency to identify and address any disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations, Native American groups and on low income populations.

There is no indication that households along either the Proposed Action or alternative Hwy 42 route are composed of a mix of minority or Native American residents which differs from elsewhere in Coos County. Therefore, analysis focused on whether a disproportionately high percentage of low income households are found along either route. This was accomplished by comparison of household income information from several geographic areas of Coos County, by reference to Census Tracts and Blocks within Census Tract. Year 2000 Census data concerning household income is not yet available, so 1990 Census data was used.

No minority or disadvantaged communities are adjacent to the proposed action or Hwy 42 alternative routes.

Socio-economics in Coos County

The economic simulation model, Impact Analysis for Planning (IMPLAN), used by ECONorthwest shows natural gas has the potential to stimulate the manufacturing sector of the local economy. The study is based upon a planning framework called IMPLAN (developed by the U.S. Forest Service), using local and national data to produce estimates of economic impact. Similar analysis of communities such as Newport, Corvallis, Albany and Grants Pass would re-affirm the significant favorable economic impacts from the introduction of natural gas to a local economy.

Socio-economics within the Proposed Action

The proposed action is adjacent to the following business entities: Lookingglass Store, Northwest Hardwoods, Southport Lumber Co., Coos Country Club, Dora Store, Four Corners Grocery and the Sumner Store.

The proposed action corridor is also adjacent to 37 rural residences. Less than 2 percent of the corridor's urban settings are outside of the Coos Bay area. These urban settings are small components of the overall Coos County economy.

The Hwy 42 route would affect the communities of Winston, Brockway, Tenmile, Camas Valley, Remote, Bridge, Myrtle Point, and Coquille.

Regional Assessment of the Natural Gas Market

According to the ECONorthwest report, the competitive advantage of natural gas over other energy sources in general for Oregon is evident: "60 percent of Oregon's urban area homes use natural gas, while about 40 percent of the homes in outlying areas use natural gas" (ECONorthwest 2000). Such statistics indicate a wide-spread consumer acceptance of natural gas.

Coos County General Economic Data

Coos County 2000 Census reports it has 62,779 residents. Its economy centers around forest products and the deep-water ocean Port of Coos Bay, but the economy continues its long struggle which began in the early 1980's, when timber production diminished significantly following the impacts of several forestry-related environmental issues

(Helvoigt, 2000). According to the Oregon Employment Department, the current (November, 2001) unemployment rate in the County is approximately 6.7 percent, as compared to Oregon's average unemployment rate of 6.4 percent. For further comparison, the November, 2000, national average unemployment rate was 4 percent, according to the Wall Street Journal. Historical data indicates the County's unemployment statistics are approximately double those of the national average (Coos/Curry/Douglas, 2000).

As shown in the Coos County Budget, the County's current tax structure includes real estate taxes, timber taxes and county fees. The County receives gross tax receipts for the general fund in the amount of approximately $2.96 million per year. Payments-in-lieu-of-taxes to the County is approximately $6,752 per year. Additional general fund revenue comes to the County from O&C lands timber revenues and from federal lands timber revenues (from the sale of timber on BLM and U.S. Forest Service lands); in 1991, these amounted to 19 percent and 22 percent (respectively) of the County's total annual budget (Maxwell et al., 1999).

Total personal income of the County is approximately $1.1 billion, which is an average annual per capita personal income of $19,494; this is approximately 82 percent of the Oregon average annual per capita personal income (Coos/Curry/Douglas, 2000).

Energy Market Competition in Coos County

Much of this information regarding energy market competition is derived from the most recent ECONorthwest report submitted for the proposed action.

Much of the electrical energy supplied to Coos Bay comes from PP&L. This employer (and its employees) would receive no significant adverse effects from the proposed action. Natural gas can only supplement (not replace) the use of electricity, and the equipment supplying the electricity would require the same amount of maintenance, regardless of the presence of a natural gas supply.

The Coos County economy currently supports propane and heating oil distributors. These supply approximately 20 percent of the heating energy needs of the cities of Coos Bay and North Bend. Small businesses transport propane and heating oil to rural residences as well as in-town businesses and residences. Businesses based outside of the County operate wholesale fuel oil and propane supply companies. Conglomerated, the nine businesses delivering fuel oil or propane to County residents and businesses (listed below) employ a total of 69 persons (ECONorthwest 2000).

The following propane dealers operate within the County: All Star Gas (North Bend), Ferrellgas (Coos Bay) and Ron's Oil Co. (Coquille).

The following heating oil dealers operate within the County: Bassett-Hyland Energy Co. (Coos Bay), Davis Oil Inc. (North Bend), Graham Oil Co. (North Bend), Tyree Oil Inc. (Coos Bay), Goddard Energy Co. (Bandon) and Hodge Distributor, Inc. (Myrtle Point).

Currently, Oregon supports an average of 1,147 residents per fuel oil or propane distributor employee. This ratio is higher than the ratio for Coos County (847 residents per distributor), due to the widespread availability of natural gas across most of Oregon (ECONorthwest 2000).

Waste - Solid or Hazardous

No waste sites, lagoons, landfills, transfer stations or water treatment plants exist in or near the proposed action corridor. Illegal dumping of refuse occurs intermittently on public lands. Sewage disposal ponds are located approximately 0.5-mile west of the proposed action corridor at Libby, and the Roseburg city dump is approximately 2 miles northeast of the Williams Gas Pipeline.

No waste sites or refuse dumping sites exist in or near the alternative route. The Myrtle Point waste water treatment plant is located approximately 1 mile from the Hwy 42 corridor, and the Coquille waste water treatment plant is approximately 0.1-mile from the Hwy 42 alternative route.

Land Uses

Forestry

The general region of the proposed action is typical in its forest products history. Since the 1850s, timber was milled into lumber or it was used as whole logs to be sold on the market. Today, forest lands are still an important source of logs for lumber, paper and plywood mills near Roseburg, Myrtle Point, Coquille and Coos Bay. The production of timber is expected to continue as an important local economic resource.

The local forests are also an important source of firewood for residences. Many rural homes are heated with wood-burning facilities (fireplaces and wood heating units). The BLM may allow wood cutting on BLM-managed lands adjacent to the proposed action corridor. The proposed action corridor includes access routes used by individuals harvesting firewood or other special forest product items within the surrounding areas.

Livestock Grazing

Farmers and ranchers in the area between Lookingglass and Coos Bay raise domestic livestock, which are the typical varieties suited to Western Oregon.

Recreation along the Proposed Action

BLM-Managed Lands

The CBW Road traverses through scattered sections of BLM public lands in the Coos Bay and Roseburg Districts. BLM public lands in the Roseburg District are part of the South River Extensive Recreation Management Area (ERMA). Public lands in the Coos Bay District are within both the Myrtlewood and the Umpqua ERMAs. Recreation uses within these ERMAs are generally characterized by dispersed types of activities that require little or no management as well as small developed recreation sites with limited facilities that support recreation uses.

The Coos Bay District RMP proposes that the CBW Road be designated as a backcountry byway. While some preliminary work was done on a backcountry byway proposal several years ago, work to complete the designation process has not been finished to date.

According to the Coos Bay District RMP (USDI 1995a), the County's BLM-managed lands are characterized as "Roaded Natural" areas. The proposed action corridor includes no BLM-managed camping or picnicking facilities.

County Parks

The parks listed below include facilities for picnicking and hiking, as well as protecting the environment and increasing the safety of facility-users. In some cases, facilities are designed and constructed to accommodate camping by conventional motorized use (car and tent, camper, truck and trailer, and motor home).

Dave Busenbark County Park (Douglas County), located at T28S, R9W, Section 16.

Severt Iverson Memorial County Park (Douglas County), located at T28S, R9W, Section 16.

Judge Hamilton County Park (Coos County), located east of Sitkum at T28S, R9W, Section 7.

Frona County Park (Coos County), located west of Dora at T28S, R11W, Section 11.

Judge Hamilton County Park is undeveloped and remains in a natural state. Frona County Park has basic facilities including toilets, picnic tables and primitive camp sites with fire rings. Both parks are Congressional withdrawals (1926) of BLM public lands for the purpose of reserving these lands in Coos County as public parks and campsites, for recreational purposes, and to preserve the rare groves of Myrtle trees.

Boat Ramps

Gold Brick Boat Ramp at Dora

Frona Boat Ramp at Frona County Park

Recreation along the Alternative Route

Hwy 42 is an important access route for recreation users. This route includes several small campgrounds and picnic areas adjacent to the highway, which are used by tourists traveling to and from the coastal recreational areas. This highway is also an important access route for those travelling to secondary roads.

The Coos Bay District RMP (USDI 1995a) indicates this route is used for recreation year-round. Bear Creek is a public camping area adjacent to Hwy 42, receiving thousands of visitors each year.

Transportation

Roads affected by the Proposed Action

CBW Road

The proposed action affects approximately 1 mile of the CBW Road in Douglas County and approximately 32 miles of the CBW Road in Coos County. The length of road between Lookingglass and U.S. Hwy 101 is approximately 54 miles. A 10-mile portion of the CBW Road, between Dora and Fairview, receives a significant amount of traffic related to administrative, commercial and residential purposes. The Four Corners Grocery is located along this affected portion of the road.

Two dairies are located in the general region of the proposed action. The proposed action corridor is not adjacent to these dairies; however, each dairy relies on milk-transport tank trucks that use the CBW Road for milk shipments.

The 0.8-mile portion of the CBW Road (west end which joins to U.S. Hwy 101) receives high usage for access to Northwest Hardwoods, Southport Forest Products and Coos Country Club.

The 10.6-mile gravelled portion of the CBW Road between the County line and Sitkum (T28S, R10W, Sec. 10) is one of the least travelled portions of the CBW Road. The CBW Road is rarely used as a transit route from Roseburg to Coos Bay, due to the many sharp curves and gravel surface east of Sitkum.

The paved portions of the CBW Road provide access to residences, timber lands and farms. Commercial traffic on this road is mostly logging trucks and equipment and dairy tank trucks. This road is a primary access route for forest fire protection efforts, land management and law enforcement. Reston Road, Myrtle Pt.-Sitkum Road and the Coquille-Fairview Road provide access from Hwy 42 to the CBW Road.

In total, approximately 33 miles of the CBW Road would be affected by the proposed pipeline project (Table 6). In some cases, the proposed pipeline crosses the road; in the remainder of the affected portions of the road, it would be buried beneath the roadway.

Table 6: Portions of CBW Road affected

Mile marker	Description of area	Road affected (miles-gravel)	Road affected (miles-paved)
6.4	CR 5, cross near Lookingglass in north edge of PP&L		X
7.5 to 8.6	CR 5, lay in road, cross Morgan Creek		1.1
1.0 to 1.7	CR 112, lay in road, cross Tenmile Creek		0.7
2.3	CR 112, cross in north edge of BPA		X
36.3 to 25.7	CR 1G, lay in gravel road through Brewster Canyon	10.6	
25.7 to 17.5	CR 1C and 1D, in pavement through Sitkum and Dora		8.2
17.1 to 17.9	CR 60B, lay in road, cross Middle Creek		0.8
13.7	CR 60B, cross south of Fairview in north edge of BPA		X
12.75 to 12.5	CR 60B, lay in road through Fairview		0.3
12 to 4.1	CR 59, lay in road from north Fairview to Sumner	4.4	3.5
4.1 to 2.2	CR 57, lay in road from Sumner to PP&L		1.9
1.7 to 0.4	CR 57, lay in road from top of hill to Coos City		1.3
		15 miles	17.7 miles

Sitkum Lane (Formally Myrtle Point - Sitkum Road)

The proposed action corridor includes approximately 0.4-mile of the Myrtle Point-Sitkum Road. The portion of affected road is between the BPA utility ROW and its intersection with the CBW Road (Table 7).

Fairview Road (formerly Coquille-Fairview Road)

The proposed action corridor includes approximately 0.1-mile of the Coquille-Fairview Road. The portion of affected road is between the PP&L utility ROW and the Four Corners intersection where it crosses the CBW Road.

U.S. Hwy 101

U.S. Hwy 101 is an important commercial truck route along the coast. At the crossing location within the proposed action corridor, trucks are destined for Coos Bay, North Bend, Bandon, Langlois, Port-Orford, Coquille, Myrtle Point and small communities or farms in the surrounding areas. It is also a major commuting route for many residents in the area. The proposed action crosses Hwy 101 once. It will be directionally-drilled to avoid impacts. At the crossing, U.S. Hwy 101 is a four-lane highway with a median strip.

Table 7: Other Public Roads Affected by Pipeline

Segment	Description of area	Road affected (miles-gravel)	Road affected (miles-paved)
A	Lookingglass Road CR 47, cross just south of Looking-glass with PP&L		X
A	Dairy Farm Road CR 108, cross 1.5 miles west of Look-ingglass with PP&L		X
E	Sitkum Lane CR 1C, lay in road west of CR 60B for 2200 feet		0.4
F	McKinley Lane CR 13, cross at CBW Road near Cherry Creek		X
H	Fairview Road CR 9, cross just south of Fairview		X
I	U.S. 101, cross at MM 243.4 near Coos City and Sumner Bridge		X
J	North Meadow Drive (not dedicated), cross gravel road	X	
J	Red Dike Road CR 183, cross to Fruitdale Drive		X
K	Fruitdale Drive CR 185, lay in road for 100 feet		0
K	Cooley Drive, lay in road for 1800 feet, mostly gravel	0.3	
K	Libby Lane CR 184, lay in road for 1200 feet		0.2
K	Lapping Road, lay in gravel road for 100 feet	X	
K	21st Street, lay in gravel road for 2200 feet	0.4	
K	Idaho Drive, lay in gravel road for 2200 feet	0.4	
K	California Drive, cross in steep dirt portion	X	
K	Anderson Avenue, cross in east side of PP&L		X
		1.1 miles	0.6 mile

Roads affected by the Alternate Hwy 42 Route

Oregon Hwy 42

Oregon Highway 42 is an important commercial truck route connecting the I-5 freeway and the inland communities to the coastal communities. Truck traffic along this route is destined for Coos Bay, North Bend, Bandon, Langlois or Port-Orford, Coquille and Myrtle Point. This highway is also a commuting and access route for residents of the coast. During the summer months, it is a major tourist route. Many portions of this route include three or four lanes of traffic. Extra lanes are supplied to traffic climbing uphill grades in several locations. The portions of the highway

from Myrtle Point to Coquille, and the last seven miles (approximately) as the highway approaches U.S. Hwy 101, are four lanes of traffic with no median strip.

U.S. Hwy 101

The Hwy 42 Alternative includes portions of U.S. Hwy 101 within the proposed route. The Hwy 42 route includes a segment approximately 0.8-mile in length, from its intersection with Hwy 42, to the BPA utility corridor very close to the CBW Road end point. This portion of the highway includes intersections with two secondary roads leading westward.

Utility Corridors

Power Lines

The proposed action corridor begins within the PP&L power line utility corridor. It continues within this corridor until it reaches the Flournoy Valley substation. For nearly half the distance from Flournoy Valley to Fairview, the proposed action corridor is adjacent to or within the BPA 230 kV power line utility corridor. For approximately 0.2-mile near Coos City, the pipeline is within the PP&L 230 kV power line utility corridor, which traverses the region parallel to the BPA utility corridor along its northward edge. A short segment of the proposed action follows a recently abandoned BPA utility corridor to the west of U.S. Hwy 101. In total, approximately 23 miles of the proposed action corridor follows power line utility corridors.

Substations

The proposed action corridor lies adjacent to several power line substation properties. These include: Co-op substation in Lookingglass Valley, the BPA Reston substation in Flournoy Valley and the Fairview substation.

Power Line Utility Corridor Access Roads

Utility crews access the power lines: 1) by working from the CBW Road or from some other county road, wherever the lines cross over the road; or 2) by working from access roads connecting to the CBW Road and other public roads.

Graveled access roads into utility corridors are constructed and maintained by the utility company. Some of these roads would be used for access to the proposed action corridor, both during pipeline construction and during maintenance procedures of the pipeline during its operation.

PP&L and BPA Access (Douglas County)

Access roads are spaced at approximately half-mile increments along the CBW Road between Lookingglass and Tenmile Creek. From there to the county line, four BPA access roads connect to the CBW Road.

BPA Access (Fairview-Reston circuit)

Access roads for this portion of the corridor are located as follows:

- Two access roads in T28S, R11W, Sec. 3.
- One access road in T28S, R11W, Sec. 4.
- Extensive road access in T27S, R11W, Sections 32 and 30.
- Four access roads in T27S, R12W, Sec. 24.

PP&L Access (Fairview-Isthmus circuit):

Access road to Segment H (along the PP&L utility corridor) is located as follows:

- One access road in T26S, R12W, Sec. 30.

BPA Access (part of the Fairview-Reedsport circuit)

Access roads to Segment J (the region west of U.S. Hwy 101) were established for BPA access. Their use for power line maintenance is no longer needed, since the power line was recently relocated. The access roads into this corridor are as follows:

- One access road coming from U.S. 101 in T26S, R12W, Sec. 23.
- One access road in T26S, R12W, Sec. 15 (again coming from U.S. 101).
- One access road in T26S, R12W, Sec. 10, coming from Shinglehouse Slough Road.
- One access road in T26S, R12W, Sec. 10, coming from North Meadow Drive.

Fiber Optic Line

Buried fiber optic line currently exists at the edge of the CBW Road and Hwy 42 over their entire lengths. This utility is buried approximately 2 feet deep at or near the edge of the roadways, and is marked with plastic markers at 1/10th-mile increments. Pipeline construction on or just outside the centerline of the CBW Road would not affect the fiber optic line. At its option, Coos County may decide to install a fiber optic carrier pipe in the pipeline ditch. The carrier pipe is typically 1.25 or 2-inch polyethylene pipe similar to gas pipe. It would be installed above the pipeline while the ditch is backfilled, with no extra excavation or site preparation required.

Encumbrances

Several timber companies have access road ROW across BLM lands. These are for gaining access to timber tracts adjacent to or near the BLM tract.

The Coos Curry Electric Cooperative also has a power line ROW in T27S, R12W, Sec. 5.

The County is seeking permission from private land owners in the proposed action corridor to install the proposed natural gas pipeline within the already-established utility corridor crossing their land. Each land parcel requires a separate easement from the underlying owner. Most land under the utility corridors is owned by individuals, forest companies and BLM. The BPA also owns a few short segments.